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Confirmation No.: 9900

REMARKS

Claims 1-6 and 8-21 were rejected under 35 U.S.C. § 103(a) as obvious over U.S. Patent 5,925,380 (Roullier et al.) in view of U.S. Patent 6,248,338 (Muller et al.) and as a further evidenced by U.S. Patent 5,382,611 (Steptoe et al. I) and its equivalent EP 0 282 451 A2 (Steptoe et al. II). Applicant traverses this rejection.

Rebuttal To New Examiner Remarks

Contrary to the Examiner's views, applicant's earlier response was not a piecemeal argument. Each of the references has been discussed. Motivation was shown not to exist in combining primary with secondary references. Incompatibilities were highlighted. Indeed, the Examiner's arguments were piecemeal responses.

None of the references reveal the claimed aspect of a fragrance being deposited onto a solid carrier. The Examiner has provided a misguided counter-argument in the last Office Action. Attention was drawn by her to Muller et al. at column 24 (lines 58-67), bridging to column 25 (lines 1-4). This section encompasses a series of dependent claims. Dependent reference claim 4 identifies a starch that is a spraydried starch. Claim 1 through which claim 4 eventually depends, recites a composition that comprises a continuous aqueous phase comprising (i.e. containing) a pregelatinized crosslinked starch. It is evident that the spray-dried starch of claim 4 is placed in the context of a component within an aqueous phase. Clearly the

Filed: September 22, 2003

Confirmation No.: 9900

composition that contains the spray-dried starch is an aqueous liquid (or at the very least not a solid carrier as required by applicant's claims).

Note that Muller has a claim 27 that eventually depends from claim 1. Claim 27 recites the further presence within the composition (i.e. the aqueous phase) of a perfume. Thus, it is revealed that Muller et al. does not teach a fragrance deposited onto a solid carrier. Fragrance is placed within the aqueous phase. None of the other references come any closer. The Examiner has failed to set forth a *prima facie* case of obviousness.

In each of applicant's amendments/responses, mention was made that destructurized type starch was not an arbitrary selection. Applicant has demonstrated in the specification under Example 21 certain surprising results. Therein it was shown that destructurized starch in comparison to unmodified (native) starch was much superior in expressing fragrance over a prolonged period of time. Thus, there is experimental basis for the selection of a destructurized starch as an advantageous carrier for surface deposited fragrance.

At no time did the Examiner ever comment on this showing. Here again the Examiner is being asked to comment.

Filed: September 22, 2003

Confirmation No.: 9900

Resubmittal of Earlier Comments

In the last Office Action, comments of the Examiner other than the items noted above were already of record. Applicant has addressed those comments in the last Amendment. Below applicant resubmits those comments.

Applicant's invention is distinguished from the references by the feature of fragrance being deposited onto the solid carrier that comprises destructurized starch. Neither Rouiller et al., Muller et al. nor Steptoe et al. (I or II) disclose this feature. A prima facie case of obviousness has not been established.

Rouiller et al. discloses an expanded solid composition having a matrix formed from a starch-rich component and containing at least some expanded thermoplastic hollow particles. These compositions were said to be useful for cosmetic or dermatological purposes. Specific products include powdered color cosmetics and dry shampoos.

Nowhere in this reference is any mention of <u>destructurized</u> starch components. Although Rouiller et al. utilizes an extruder in the process, the reference emphasizes that extrusion be limited to temperatures below 100°C. See column 1 (lines 24-26); column 5 (lines 38-41); and Examples 1 and 2 at column 6 (lines 37 and 67).

Filed: September 22, 2003

Confirmation No.: 9900

Temperatures at which Rouiller et al. extrude are insufficient to destructurize starch. Applicant directs attention to the disclosure of Steptoe et al. I which requires elevated temperatures to achieve destructurization. The temperatures are stated to be in the range of 100° to 200°C, and most preferably between 160°C to 185°C. See column 3 (lines 32-38); column 6 (lines 52-53); column 7 (line 6); Table 1 (fifth column) and column 9 (lines 22-24). Operation at temperatures below 100°C as in Rouiller et al. would not achieve the desired destructurization of starch. Accordingly, Rouiller et al. neither expressly nor inherently discloses the presently claimed destructurized starch element.

Another deficiency is the absence of any fragrance mentioned by Rouiller et al. Yet if the skilled chemist were to add fragrance, the reference suggests that the extruded compositions because of the lower processing temperatures "can thus contain cosmetic or dermatological substances which are heat-sensitive or unstable at temperatures above 100°C". See column 1, lines 24-29.

Muller et al. is a reference that unabashedly focuses on <u>pre-gelatinized</u> starch. See the Abstract and column (line 43). This contrasts with the destructurized starches necessary for the present invention. Indeed, Muller et al. specify that a decisive feature of the invention is that the starch derivative to be used according to the invention is "pre-gelatinized". See column 3, lines 35-37.

Filed: September 22, 2003

Confirmation No.: 9900

Perfumes are formulated into the Muller et al. compositions. Most of the Examples have formulas with perfume as a component. The perfume is mixed with the pre-gelatinized starch in an aqueous system. An <u>intimate mixture</u> of perfume dispersed with starch throughout the composition is thereby achieved. The Examiner has directed attention to the following statement by Muller et al.: "The composition according to the invention can be provided in any form, for example, as solution, emulsion, suspension, gel or foam. It can also be provided as a dry powdery composition which is reconstituted in an aqueous medium upon use" (col. 5, lines 11-15). Yet even in a dry powdery form, perfume will be distributed internally along with starch and other ingredients of the disclosed composition. Not taught is that the perfume must separately be applied as a deposit onto the overall solid carrier.

In the Office Action at page 5 (first full paragraph), the Examiner considers that in Muller et al. "that fragrance would be interspersed with the starch and therefore, found on the starch."

Applicant has further amended the independent claims to address this issue. Thus, claim 1 (ii) now recites a fragrance deposited onto the <u>solid carrier</u> comprising the destructurized starch. Parallel amendments have been made to independent claims 10 and 11. Neither Rouiller et al. nor Muller et al. teach or suggest depositing fragrance onto any of their compositions that might be in solid form. Applicant further notes that claim 1 (iii) requires that the solid carrier besides starch have at least one cosmetic agent. Any fragrance deposited must be deposited onto the combination of starch/cosmetic agent. This is not the same as merely mixing the perfume with starch in a solid formula.

Filed: September 22, 2003

Confirmation No.: 9900

Steptoe I and II (which are essentially identical texts) teach the existence of destructurized starch. No mention is made regarding use of this type of starch in cosmetic compositions. Neither is there mention of any fragrance or perfume.

A combination of Rouiller et al. in view of Muller and Steptoe et al. (I and II) would not render the instant invention obvious. Neither directly nor inherently does Rouiller et al. teach a destructurized starch. Secondly, fragrance is not disclosed. If the skilled chemist were to learn anything from Muller et al., it would be to avoid all but pre-gelatinized types of starch. Consequently, the chemist is still left without direction on the proper starch or on how a fragrance is to be incorporated into the starch.

Steptoe I and II reveal the destructurized form of starch. Yet the skilled chemist is taught by Rouiller that an essential feature must be to process at temperatures below 100°C. This is not how to achieve destructurization. There would be no motivation to incorporate destructurized starch into Rouiller et al. Neither would the skilled chemist incorporate destructurized starch into Muller et al. The latter specifically teaches a need for pre-gelatinization which is a different starch transformation. And none of the references provide any disclosure to deposit fragrance onto the solid carrier that comprises the destructurized starch. A prima facie case of obviousness has not been presented.

Filed: September 22, 2003

Confirmation No.: 9900

Destructurized type starch is not an arbitrary selection. Applicant has demonstrated in their specification under Example 21 certain surprising results. Therein it is shown that destructurized starch in comparison to an unmodified (native) starch was much superior in expressing fragrance over a prolonged period of time. Thus, there is an experimental basis for the selection of a destructurized starch as an advantageous carrier for a surface deposited fragrance.

In the Office Action at page 6 (first full paragraph), the Examiner has a discussion apparently relevant to U.S. Patent 5,736,209 (Andersen et al.). Applicant is uncertain as to whether the Examiner intends the document to be an applied reference (i.e. in combination with Rouiller et al., Muller et al. and Steptoe et al. I and II). Nonetheless, applicant does have some comment with respect to the paragraph at page 6.

Andersen et al. was presented as support that starch binders are sticky once dissolved or gelatinized in water. Stickiness complicates manufacturing since sheets are articles with high starch loading tend to stick to their molds. Further, the Examiner explains that unmodified starch granules also have drawbacks. A stated problem of unmodified starch granules is that they are generally insoluble in water and thereby act as merely passive fillers in wet systems. The theory is then presented that one needs to avoid the gelatinized and also the unmodified (native) starches. Ergo, destructurized starches would have neither of these deficiencies.

Filed: September 22, 2003

Confirmation No.: 9900

There are many problems with this reasoning. Most problematical is that the references (Rouiller et al. and Muller et al.) themselves find benefit in starches other than destructurized ones. Muller et al. is very clear to use a pre-gelatinized variety. Rouiller et al. does not characterize the state of starch after processing. But the conditions of less than 100°C are not likely to produce destructurization. Consequently, there is no motivation to substitute the preferred starches of the references with some theoretical advantage culled from Andersen et al.

Further the claimed compositions of the present invention are solids. Little if any water is normally present. Absent water, a non-modified starch granule even though insoluble, would not be a detriment. Neither would a pre-gelatinized starch. Any process to manufacture a solid composition must by definition eliminate to a large extent liquid matter. Removal of water would remove stickiness. In some instances a sticky component would even be a preferred one. Solids can be aggregates and these may indeed require a binder much like brick and mortar. In summary, there are as many reasons to utilize pre-gelatinized and/or non-modified starches as there are motivations against their use.

Approaching Appeal

In the event the Examiner still will not allow the claims, applicant has one request. The Examiner should now do any necessary further searching. Applicant anticipates to file an Appeal Brief. It would be the second one in this case.

Subsequent to the payment of the large Appeal fee and effort in drafting a Brief, it

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would be unfair to applicant for the Examiner to again re-open prosecution and not have the Board of Appeals and Interferences decide the matter.

Respectfully submitted,

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